

Claim Rejections – 35 USC Section 102
In response to Claim #1 - Rejection under 35 USC § 102

A. The Examiner stated:

"2. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Navarro, US 6038795."

The Examiner stated "Regarding Claim 1, Navarro discloses a digging attachment (10) for securement to a work type vehicle that could be used for constructing a skimmer box for a swimming pool, comprising:

A connecting frame (17) with extensions (top and bottom arms of 17 in Fig. 2) near the bottom of said connecting frame (17) allowing for the connection to a vehicle latching mechanism;

A base (12), shaped like a box, with five sides and an open end, including; a top side, a bottom side, a left side, a right side (column 2 lines 30-33) and a back side (14) as well as two open cutouts (13);

The said open side has edges (60) that are shaped to cut through the surface;

The back side of said base (12) connected perpendicular to said connecting frame (17) and near the bottom so that the base is directed just above the latching mechanism and along the opposite side of the extensions providing support when the vehicle is attached (Fig. 1)."

In addition the Examiner stated ".. Navarro shows connecting frame 17 having legs comprising extensions which extend along the length of the device 10 (see Fig. 2, near 19). These extensions allow for connection to a vehicle latching mechanism."

"Regarding the applicant's arguments that the connecting frame 17 is not connected perpendicular to the back side, the connecting frame 17 is generally perpendicular to the back side when arms 19 lie parallel to the bottom of the device 10. Additionally, the base is connected to the connecting frame 17 near the bottom of the connecting frame, the base 10 capable of being directed just above a latching mechanism. The previous rejection of claim 1 has therefore been repeated in this office action."

AMENDMENT:

To clarify the invention, we submit a revised Claim #1 with modifications shown below:

1. An attachment for securement to a skidsteer loader, backhoe or other similar work-type vehicle for use in constructing a skimmer box for a swimming pool having;

A connecting frame with extensions ~~near the bottom~~ directly below of said connecting frame and slanting away from said connecting frame allowing for the connection to a vehicle latching mechanism whereby the arms from a skidsteer loader, backhoe or other work-type vehicle can be inserted into the extension and underneath a bottom side ;

A base, shaped like a box, with five sides and an open end, including; a top side, said a bottom side, a left side, a right side and a back side, as well as two open cutouts;

The said open side has edges that are shaped to cut through the surface;

The back side of said base rigidly connected perpendicular to said connecting frame and substantially near the bottom so that the base is directed just above the latching mechanism and along the opposite side of the extensions providing support when the vehicle is attached.

RESPONSE:

We rely on two standards to guide our discussion. "To find anticipation of claims, a challenger must show that every element of the claimed invention must be identically shown in a single reference." *In re Bond*, 910 F.2d 831, 15 U.S.P.Q. 2d.1566,1567,1568 (Fed. Circ. 1990). "Any degree of physical difference, however slight, invalidates claims of anticipation." *Ultradent Products Inc. v. Life-Like Cosmetics, Inc.* , 39 U.S.P.Q. 2d 1969, 1980 9Utah 1996).

Claim 1, now revised, recites "A connecting frame with extensions directed below said connecting frame and slanting away from said connecting frame allowing for the connection to a vehicle latching mechanism whereby the arms from a skidsteer loader, backhoe or other work-type vehicle can be inserted into the extension and

underneath a bottom side." In addition, the reference to "rigidly" attached has been added. This language distinguishes over Navarro under Section 102.

Navarro does not show extensions directed below said connecting frame and slanting away from said connecting frame allowing for the connection to a vehicle latching mechanism whereby the arms from a skidsteer loader, backhoe or other work-type vehicle can be inserted into the extension and underneath a bottom side. The significance of not having the "extensions directed below said connecting frame and slanting away from said connecting frame" requires Navarro to utilize a pulling cable process that would not provide precision and control necessary to construct or form a swimming pool skimmer box of a specific size and shape. The invention describes "pushing" by being "aligned" and "inserting fully into the ground" the base of an attachment secured by a vehicle latching mechanism (Paragraph 6 - Brief summary of Invention) powered by a work type vehicle. The extensions allow for this control, support and precision by inserting the arms of a work type vehicle underneath a bottom side. This provides the precision in forming the shape of the skimmer box. Precision is necessary to eliminate the manual labor necessary to smooth the walls and thus minimize the amount of gunite needed.

The Examiner noted: "Regarding the applicant's arguments that the connecting frame 17 is not connected perpendicular to the back side, the connecting frame 17 is generally perpendicular to the back side when arms near 19 lie parallel to the bottom of the device 10. Additionally, the base 10 is connected to the connecting frame 17 near the bottom of the connecting frame, the base 10 capable of being directed just above a latching mechanism."

Applicant understands that arms of Navarro near 19 could pivot and be positioned parallel to the bottom of the device 10 and be generally perpendicular to the back side. Applicant contends Navarro is "not connected" perpendicular to the back side. We have modified claim 1 to read "rigidly" connected perpendicular to the back side to distinguish. Also, we have modified "near the bottom" to "at the bottom" and applicant contends Navarro is not "at the bottom" so that the base is directed just above the latching mechanism and along the opposite side of the extensions providing support when the vehicle is attached." The latching mechanism in Navarro (16) is shown in (Fig.1) to be

towards the top of the device used for "pulling" so that the base is not located above the latching mechanism nor is it along the opposite side of the extensions providing support when the vehicle is attached. The invention was designed with the back side of said base perpendicular to said connecting frame and near the bottom so that the base is directed just above the latching mechanism to provide support when the vehicle is attached and the attachment is "aligned" and "inserted in the wall" to form the skimmer box.

Examiner contends that connecting frame 17 having legs comprising extensions allow for connection to a vehicle latching mechanism. Applicant disagrees for the following reasons: 1) Allowing that extensions in Navarro could extend the entire length of the device 10 (contrary to Fig. 1) and those extensions could allow for connection to a vehicle latching mechanism. However, this would preclude the use of the device in Navarro for its intended purpose.

If the device 10 had a connecting frame 17 having legs comprising extensions which extend along the "entire length of the device", those extensions would prevent the device from operating for its intended purpose (dredging). The connecting frame of Navarro must pivot at 19 to compensate for the difference between the angle of the tow line and the position of the device 10 flat on a bottom surface to allow effective dredging.

If the legs are extended, when the connecting frame pivots at 19, the extended legs would dig into the dredged surface, raising the device along its pivot axis preventing the device from operating for its initial intended purpose.

Therefore, the distinctions noted above render the claims patentable over Navarro and meets the conditions for patentability per 35 USC § 102. Based on the foregoing clarifications, we request reconsideration of Claim 1 being allowed.

In addition, these distinctions are submitted to be of patentable merit under Section 103 because of importance of the location of the extensions to allow for connection of a skidsteer loader, backhoe or other work type vehicle to provide a stable and precise operation.

In response to obviousness rejections for Claims # 2, 3 and 4 rejected under 35 USC § 103(a)

B. The Examiner stated 35 U.S.C. 103 (a):

“(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the difference between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.”

RESPONSE:

Non Analogous Art

To rely on a reference under 35 U.S.C. 103, it must be analogous prior art. To rely on a reference as a basis for rejection of an applicant's invention, the reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the invention was concerned. In re Oetiker, 977 F.2d 1443, 1446, 24 USPQ2d 1443, 1445 (Fed. Cir. (1992). Navarro should not be relied upon as a reference.

Navarro's dredging device is to be used in rivers and on banks is not in the field of the applicant's endeavor of constructing inground gunite swimming pools. Dredging emphasizes volume over precision. The purpose of dredging is to deepen or widen waterways. Swimming pool construction particularly using gunite materials and skimmer box construction emphasizes precision and a set volume. Swimming pools are installed in neighborhoods and fenced back yards with limited space. The purpose of skimmer box construction is to form a specific shape and size at the wall of the pool for the skimmer box. "The invention quickly forms the skimmer box structure in seconds with very smooth walls and little effort." (Paragraph 6 -Brief Summary of Invention) "This invention significantly reduces the time required to prepare the skimmer box for a swimming pool." (Paragraph 7 - Brief Summary of Invention) "The use of the invention will reduce the amount of gunite required in the swimming pool construction process due

to the skimmer box wall being cut to size by the invention." (Paragraph 8 - Brief Summary of Invention) A dredge device is designed to dredge as much material as possible. "When the dredge is full", it is brought ashore, "emptied" and then the "dredge brought back for a repeat of the dredging activity." (Column 5, Line 44-54) "The dredging apparatus ...is a rectangular-shaped cage having a dimension of substantially 12 feet in length, 9 feet in width and 3 feet in height" (Column1, Line 24-26) providing a volume of approximately 324 cubic feet relative to a skimmer box of 2.5 feet by 2.5 feet by 2.5 feet of approximately 16 cubic feet.

Navarro's dredging device to be used in rivers and on banks is not reasonably pertinent to the particular problem with which the invention was concerned. The invention was concerned with using precision to reduce the time, material and effort required to construct a skimmer box during swimming pool construction. The digging of smooth walls is currently performed by manually. Manually digging is time intensive and requires much physical work and can be dangerous. Smooth walls, needed for the skimmer box, reduces the costs of the gunite. Creating the smooth walls with the invention reduces the time to build the skimmer box, reduces the chance of injury from manual digging and reduces the amount and cost of gunite concrete needed to coat the skimmer box walls. Navarro is from a different technical field than that of the invention evidenced by the US Patent Classification.

Therefore, we believe Navarro should not be used a reference under 35 U.S.C. 103.

Look at the Invention as a whole - including the problem solved

In determining the differences between the prior art and the claims, the question under 35 U.S.C. 103 is not whether the differences themselves would have been obvious, but whether the claimed invention as a whole would have been obvious. *Stratoflex, Inc. v. Aeroquip Corp.*, 713 F.2d 1530, 218 USPQ 871 (Fed. Cir. 1983). The invention as a whole embraces the structure, its properties and the problem it solves. The particular problem facing the inventor must be considered in determining obviousness of its creation. Thus, the question is whether what the inventor did would have been obvious to one of ordinary skill in the art attempting to solve the problem upon which the inventor

was working. The problem solved by the invention is always relevant. *In re Wright* 848 F.2d 1216, 6 U.S. P.Q. 1959, 1961, 1962 (Fed. Cir. 1988).

The purpose of Powers is to create a level shelf to be used as a horizontal top reference point for the vertical wooden forms (falsework) in building a poured concrete inground swimming pool. Powers also talks about excavating the ground. However, "excavating" can be done with a worktype vehicle or by manually digging. There is no mention of use of a work type vehicle for the construction of the skimmer box. Within paragraph 5 of the application, we have stated that "current attachments used on skidsteer loaders are not shaped specifically to form a skimmer box and skimmer boxes are formed today by manually digging and shaping the hole for the skimmer box." Because of the size of the skimmer box relative to a pool and the precision required, Powers still requires digging a skimmer box manually.

Specifically regarding Claims 2 & 3, Powers talks about a "horizontal lower surface" failing to mention the need for smooth walls. Powers uses wall form panels which do not require smooth walls and using a vinyl pool liner is not concerned with the problem of gunite costs which can be considerable. Much of the time required in the manual digging process is to smooth the walls. We believe it would not have been obvious to one of ordinary skill in the art attempting to build a skimmer box to build the invention and use in such a manner.

Negative teachings

As the examiner mentions, "complicated bucket maneuvering" would be required if someone attempted to use a standard bucket with a work type vehicle to build a skimmer box, this would cause damage to the walls of the pool and would not be able to form the smooth walls. In addition, those involved with building swimming pools understand that much equipment and individuals are required and needed to be brought to a work site including: large work type equipment and the standard buckets carried on extended trailers. Thus, designing another large attachment or tool needed to be brought to a work site for building a swimming pool would have been discouraged and a deterrent to making the invention. Also, as the Examiner suggests to modify Navarro's dredging device "to be in dimensions suitable for accommodating a standard size skimmer box, such as 15 to 30 inches wide by 15 to 30 inches high by 15 to 30 inches deep (claim 2) or

24 inches wide by 28 inches high by 28 inches deep (claim 3)" would be discouraged to a person having ordinary skill in the art of dredging. A dredge device is designed to dredge as much material as possible. The fact that the prior art contains negative teachings, which would have discouraged and deterred a person having ordinary skill in the art from making the invention, is further evidence of non-obviousness. *Mobil Oil Corp. v. W.R. Grace & Co.*, 367 F.Supp. 207, 180 U.S.P.Q. 418, 452 (Conn. 1973).

Missing suggestion or motivation

In addition, the Examiner has not provided the "suggestion" or desirability of making the combination of the dredging device of Navarro and the method of building a skimmer box (Powers). When prior art references require a selective combination to render obvious a subsequent invention, there must be some reason for the combination other than the hindsight gleaned from the invention itself. Something in the prior art as a whole must suggest the desirability, and thus the obviousness, of making the combination. *Uniroyal Inc. v. Rudkin-Wiley Corp.*, 837 F.2d 1044, 5 U.S.P.Q. 2d 1434 (Fed. Cir. 1988). The Examiner has not provided such a suggestion or motivation with Navarro and Powers.

According to *Ex parte Kranz*, 19 U.S.P.Q.2d 1216, 1218 (B.P.A.I. 1990), before obviousness may be established, the Examiner must show that there is either a suggestion in the art to produce the claimed invention or a compelling motivation based on sound scientific principles. Logic compels that the suggestion or motivation be accompanied by a general knowledge of the existence of art-recognized techniques for carrying out the proposed invention. No mention is made in either Navarro or Powers regarding techniques, tools or methods for constructing skimmer boxes.

Obviousness under 35 U.S.C. 103 is a question of law. Both the suggestion and the expectation of success must be founded in the prior art, not in the applicant's disclosure. (*Amgen Inc. v. Chugai Pharmaceutical Co. Ltd*, 927 F.2d1200,18 U.S.P.Q. 2d 1016, 1022 (Fed. cir. 1991)). There is no suggestion nor expectation of success in Navarro that a dredge device could be made 15 to 30 inches length, width and height. There is no suggestion nor expectation of success in Navarro that a dredge device could be used as a skimmer box forming tool. Even if a dredge device as described in Navarro were to be made the size of a skimmer box (contrary to a dredging operation volume

focus), it would be unsuitable for forming a skimmer box for lack of controllability and inherently unsafe characteristics. In addition, there is no suggestion or motivation to attach Navarro to a work type vehicle, especially a fork lift vehicle as it is currently operated by cables for dredging a river.

Therefore, it was not shown that there is either a suggestion in the art to produce the claimed invention nor a compelling motivation based on sound scientific principles.

Ordinary skill in the art

We believe it is not obvious to one of ordinary skill in the art to design the base to be any suitable dimensions or to use Navarro in combination with Powers to construct the invention.. Navarro discloses a "dredge device" (Column 2, line 23) and not an attachment for "forming" or "constructing" a skimmer box. A dredge device is designed to dredge as much material as possible. The "full dredge" is brought ashore, "emptied" and then the "dredge brought back for a repeat of the dredging activity." (Column 5, Line 44-54) The dredging device is a rectangular shaped cage having a dimension of substantially 12 feet in length, 9 feet in width and 3 feet in height" (Column 1, Line 24-26) providing a volume 324 cubic feet relative to 16 cubic feet for a typical skimmer box (less than 5%).

Dredging emphasizes volume over precision. The purpose of dredging is to deepen or widen waterways. Skimmer box construction emphasizes precision, smooth walls and a set volume. The purpose of skimmer box construction is to form a specific shape and size at the wall of the pool. "The invention quickly forms the skimmer box structure in seconds with very smooth walls and little effort." (Paragraph 6 -Brief Summary of Invention) "This invention significantly reduces the time required to prepare the skimmer box for a swimming pool." (Paragraph 7 - Brief Summary of Invention) "The use of the invention will reduce the amount of gunite required in the swimming pool construction process due to the skimmer box wall being cut to size by the invention." (Paragraph 8 - Brief Summary of Invention). The issue of obviousness is determined entirely with reference to a hypothetical "person having ordinary skill in the art." It is only that person who is presumed to be aware of all the pertinent art. We do not believe an individual with ordinary skill in the art would have combined Navarro and Powers to create the invention

Modification renders unsatisfactory of intended purpose and changes principle operation

If a proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification. See *In re Gordon*, 733 F.2d 900, 221 U.S.P.Q. 1125, 1127 (Fed. Cir. 1984). The Examiner suggests using the base (10) of Navarro to attach to a work type vehicle to form a skimmer box. The Examiner stated "Navarro shows connecting frame 17 having legs comprising extensions which extend along the length of the device 10 (see Fig. 2, near 19). These extensions allow for connection to a vehicle latching mechanism." Examiner contends that connecting frame 17 having legs comprising extensions allow for connection to a vehicle latching mechanism. This would however modify the prior art unsatisfactory for its intended purpose dredging. In addition, this modification would not work for use as a skimmer box forming tool as the A shaped framed would cut into the ground prior to base, destroy the wall where the skimmer box is to be formed and the box would pivot eliminating any hope for precision and smooth walls.

In addition, this suggested modification would change the principle of operation of the reference and thus there is no suggestion or motivation to make the proposed changes. *In re Ratti*, 270 F.2d 810, 123 USPQ 349 (CCPA 1959)

Lack of implementation

If the invention were in fact obvious, because of its advantages, those skilled in the art surely would have implemented it by now. Many swimming pools are constructed everyday with work type vehicles but no such attachment for forming a skimmer box has been formed even though the dangers of manually digging and the time requirements of manually digging are well known. The fact that those skilled in the art have not implemented the invention, despite its great advantages, indicates that the invention is not obvious. Especially regarding Claim #4, the method, the savings in time, costs and effort are significant.

Claimed Features Lacking

Even if Navarro and Powers were combined, the references would not meet the claims. Navarro does not have a connecting frame with extensions directed below said connecting frame and slanting away from said connecting frame allowing for the connection to a vehicle latching mechanism whereby the arms from a skidsteer loader, backhoe or other work-type vehicle can be inserted into the extension and underneath a bottom side.

Secondary Considerations

In addition, the secondary consideration of obviousness should be considered. These include: the long felt but unsolved needs, commercial success and prior unsuccessful attempts to solve the problem addressed by the invention. These are valid and relevant criteria in determining the level of ordinary skill in the relevant art and therefore, in determining obviousness. *Sarkisian v. Winn-Proof Corp.*, 696 F.2d 1313, 217 U.S.P.Q. 702, 709 (9th Cir. 1983).

We offer the attached Affidavit from one of the inventors regarding the commercial success he has achieved. In addition, we will provide supplemental evidence, if necessary, of affidavits from two individuals with over 35 years experience in the industry of swimming pool construction attesting to the commercial success and long felt but unsolved needs of the skimmer box device.

Conclusion

In conclusion, the distinctions noted above render the claims patentable over Navarro and meets the conditions for patentability per 35 USC § 102. Based on the foregoing clarifications, we request reconsideration of Claim 1 being allowed.

In addition, the invention submitted is patentable merit under Section 103 and is not obvious based on Navarro and Powers and we request reconsideration of Claims 2, 3 and 4 as well.

We appreciate your attention and additional review of this application and its subsequent correspondence. If you have any questions, please feel free to call me at (281) 301-2005. Also, we look forward to discussing at an interview as we have requested. Please call us to arrange a time.

Thanks,



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